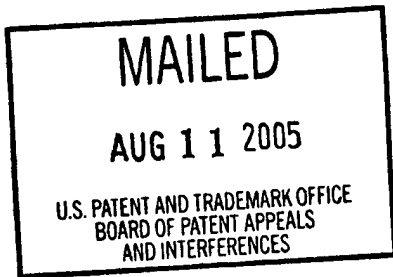


The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte EDWARD KLEIN, CHRISTOPHER J. WHITE,
JEFFREY WEISS and BAPPA SINHA



Appeal No. 2005-1406
Application No. 09/501,202

ON BRIEF

Before THOMAS, KRASS, and DIXON, Administrative Patent Judges.
THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 1-29.

Representative claim 12 is reproduced below:

12. A method for removing a failed node from an ATM ring, the method including:

determining that a node has failed;

tearing down virtual circuit connections directed to or initiating from the failed node;

tearing down virtual paths assigned to the failed node; and

providing instructions to other nodes on the ring to update ring topology information at the other nodes, the updated ring topology information indicating that the failed node is removed from the ring.

The following references are relied on by the examiner:

Nakata	5,500,857	Mar. 19, 1996
Chan et al. (Chan)	6,301,254	Oct. 09, 2001 (filed Mar. 15, 1999)
Ballintine et al. (Ballintine)	6,366,556	Apr. 02, 2002 (filed Jun. 22, 1998)
Higgins et al. (Higgins)	6,370,146	Apr. 09, 2002 (filed Jun. 29, 1998)

Claims 1-29 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, as to claim 12, the examiner relies upon Chan alone. The examiner adds Higgins to Chan as to dependent claims 13 and 21. Claims 1-3, 6-11, 14-16, 19, 20 and 22-29 stand rejected under 35 U.S.C. § 103 as being obvious over Higgins in view of Chan. To this combination of references the examiner adds Ballintine as to claims 4 and 17 and separately adds Nakata as to claims 5 and 18.

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief for appellants positions and the answer for the examiner's positions.

OPINION

Since we sustain only the rejections of independent claim 12 and its dependent claims 13 and 21, the rejections of the other claims on appeal are reversed.

In rejecting independent claim 12, the examiner relies upon Chan alone. We simply add the following analysis to that set forth to the examiner's positions with respect to this claim and this rejection.

We do not agree with appellants' arguments traversing this rejection at page 20 of the principal brief on appeal. At page 21, appellants recognize that Chan discloses two types of failure that may occur in his ATM/Sonet nodal system, that is, Sonet failures involving path failures and ATM failures involving node failures. By recognizing that Chan does teach node failures, appellants implicitly recognize that a termination is made of a failed node as in claim 12 on appeal. A view that even though Chan provides no disclosure that a node which detects the failure is able to distinguish between these failures, that is,

distinguish between link failures and node failures since no types of failures may be detected in response to a loss of communication with another node, is misplaced. Figures 9-11 and the corresponding discussions associated with these Figures teach specifically and show that structural elements within a given node may be determined to have failed. Even now, from a complete study of Chan, it appears that from either a path failure or a node failure, similar or corresponding types of responses exist such as set forth in the nodal notification techniques at the end of the flowcharts in Figures 10 and 11, and thus it doesn't necessarily follow that because Chan teaches a corresponding or similar notification techniques to other nodes that the reference does not positively teach the difference between node failures and path failures.

We are equally unpersuaded by appellants view taken at page 22 of the principal that Chan teaches away from performing protection switching by updating the LUTs of the nodes, that is, the lookup tables, with respect to each node as depicted in the sequence in flowchart Figure 2, label 250. The fact that Chan does teach that updating the LUTs may be considered to be a nonfavored approach as discussed beginning at column 10, line 15,

the preferred approach still indicates to us that the reference fails to teach away or actively discourage any manner of reaching the other limitations of claim 12 on appeal. This discussion at columns 10 - column 12 relating to figures 3-5 fairly indicates this. Because the protection switch block 340 and the protection switch 300 of Figure 3 changes or otherwise alters the virtual path identifier and virtual table entry information in the data structures of Figures 4 associated with each node, the tearing down of virtual circuit connections and the tearing down of virtual path connections as well as the ring topology being updated among the various nodes is clearly taught as recited at the remaining portions of claim 12 on appeal.

Consequently, we do not agree with appellants' assertion in the brief and the reply brief that Chan does not effectively remove a failed node from the ring. It appears to us that the nature of removable operations recited in claim 12 does not require physical removal consistent with appellants' own disclosed intent of meaning of this term according to the discussion of specification Figure 4 at pages 7 and 8. Changing the virtual path and virtual circuit table associated with ATM networks generally is equivalent to a logical rather than a

physical removal of a given node that has failed. Additionally, because of the initial ability of Chan's system to delete nodes as noted earlier in this opinion with respect to Figure 2, the actual physical removal of a node would obviously have been contemplated by the artisan viewing the overall teachings of Chan anyway. Thus, we sustain the rejection of independent claim 12 on appeal.

We also sustain the rejection of its dependent claims 13 and 21 based on the additional teachings we note with respect to Chan notwithstanding the examiner's additional, cumulative reliance upon Higgins. The examiner's remarks at pages 15 and 16 of the answer responding to appellants' arguments in the brief have not been challenged by appellants in the reply brief.

Here, the examiner states that "Chan discloses that any node on the ring may detect a failure and communicate this failure to other nodes in col. 9, lines 52 - col. 10, line 9." Even though the examiner takes the view that Chan does not disclose a ring hub node as in dependent claim 13, it appears to us that consistent with this reasoning of the examiner, the examiner may well consider that all nodes or each node in Chan may be considered to be a broadly claimed ring hub as in claim 13 with respect to each other node because each node is given the test of

determining that a given node has failed with respect to any other node. We have also indicated earlier with respect to the features of independent claim 12 that the claimed features of tearing down virtual circuits and virtual path connections are already considered to have been taught in addition to their recitation again in dependent claim 13.

As to Higgins, we observe first that the discussion with respect to Figure 3 beginning in the middle of column 10 of Chan indicates that each node appears to have within it a Protection Switch Block 340 consisting of specified structural elements which perform reconsider operations with respect to the VPI and VCI data structures discussed earlier. Because this is an application specific integrated circuit (ASIC), it is consistent with Higgins's teachings of a host computer controlling operation as asserted by the examiner at page 15 of the answer. (It is noted with respect to the arguments presented with respect to the first stated rejections of independent claims 1, 14 and 24 on appeal that appellants have not challenged the combinability of Chan and Higgins in the arguments beginning at page 13 of the principal brief.) In any event, a ring hub node as recited in dependent claim 13 is not functionally defined to be

distinguished in any way from any other stated node in the claims anyway.

Finally as to dependent claim 21, we note that appellants' discussion of Chan in the paragraph bridging pages 20 and 21 of the principal brief on appeal already recognizes that the loss of communications within a given node is determined to be a basis of a failure in Chan anyway. Note the discussion as well beginning at column 5, line 52 and the discussion beginning at column 13, line 64.

Thus, we sustain the rejection of independent claim 12 and its dependent claims 13 and 21 on appeal.

We reach an opposite conclusion, however, with respect to the other claims remaining on appeal.

At the outset, we generally agree with the examiner's views expressed initially at page 4 of the answer that the so-called loopback node of Higgins described there relates to the claimed ability of operating the given node as a bypass for ATM traffic on a ring as recited in each of independent claims 1, 14 and 24 on appeal. It appears as well that the teaching at column 8 beginning at line 56 through much of column 9 of Chan teaches a corresponding bypass node of operation for initially added nodes to a ring.

On the other hand, we do not agree with the examiner's views that Higgins otherwise discloses in an open mode that each of the nodes receives information such as to function in a passthrough capability where the claim requires "operating the given node as a pass through for the ATM traffic on other existing virtual path connections on the ring before the virtual path is established for the given node" as recited in independent claim 1 on appeal. There are corresponding features recited in independent claims 14 and 24.

Although much can be said of the examiner's views expressed at pages 10-12 of the answer in the Responsive Arguments portion of the answer, we are persuaded by appellants' view expressed as to the teachings of the manner in which Higgins operates as initially expressed by appellants at pages 10-12 of the principal brief on appeal as well as the extensive discussion at pages 1-8 of the reply brief with respect to the examiner's views expressed in the Responsive Arguments portion of the answer. Basically, we agree with the views of appellants that according to the teachings of Higgins, control messages that may be transported between nodes do not equal or are not equivalent to the ATM traffic [packet information] of independent claims 1, 14 and 24 on appeal. Thus, there is no claimed pass through in a given

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node to be inserted into the ring for ATM traffic before the actual tap has been established. That portion of the column 4 at lines 35-47 of Higgins relied upon by the examiner does indicate to us that after configuration of a new node has taken place, it is only then that an equivalent pass through of packet information may occur with the newly added node.

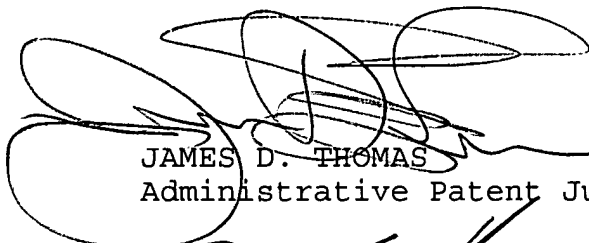

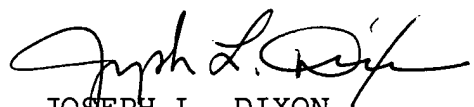
In view of the foregoing then, we do not sustain the rejections of independent claims 1, 14 and 24 on appeal in the stated rejection, and we do not sustain the rejections associated with respect to their dependent claims separately relying upon Ballintine and Nakata since the examiner does not assert that these references teach the deficient feature anyway.

In closing, we have sustained the rejection of independent claim 12 and its dependent claims 13 and 21, but have reversed the remaining rejections of the other claims on appeal. Therefore, the decision of the examiner rejecting claims 1-29 under 35 U.S.C. § 103 is affirmed-in-part.

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No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a) (1) (iv).

AFFIRMED- IN- PART

)	
JAMES D. THOMAS)	
Administrative Patent Judge)	
)	
)	
ERROL A. KRASS)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
)	
)	
JOSEPH L. DIXON)	
Administrative Patent Judge)	

JDT/vsh

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